

### REMARKS

In this Amendment C, claims 1 and 11 have been amended to more particularly claim certain embodiments. Specifically, these claims have been amended to indicate that from 0 to 10% of the recovered granules of sucrose will pass through a 100 mesh screen. Support for these amendments may be found, for example, in paragraph [0033], and in particular the table therein, of Applicants' specification as filed.

Accordingly, upon entry of this Amendment C, claims 1-3, 5-14, and 16-22 remain pending in this application.

### Rejections under 35 U.S.C. §103(a)

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3, 5-14, and 16-22 under 35 U.S.C. §103(a) over U.S. Patent No. 5,549,757 to Morano (Morano).

#### **1. The Claimed Subject Matter**

Claim 1, from which claims 2, 3 and 19 depend, is direct to a process for preparing a free-flowing granular sugar ingredient **suitable for forming compressed confections**, or the sugar ingredient resulting therefrom. In relevant part, the process comprises:

(i) feeding granulated sucrose and a solution of corn syrup to a . . . mixer . . . to provide a uniform wet mixture of the sucrose coated with the corn syrup;

(ii) discharging the wet mixture to a size reduction comminutor to break up lumps;

(iii) feeding the comminuted wet mixture to a drier to produce a dried mixture;

(iv) feeding the dried mixture to a sieve; and

(v) recovering granules of sucrose bound together by corn syrup solids, **wherein from 0% to 10% of the recovered granules will pass through a 100 mesh screen.**

Claim 5, from which claims 6-10 and 21 depend, is also directed to a process for preparing a free-flowing granular sugar ingredient **suitable for forming compressed confections**. In relevant part, the process comprises:

feeding granulated sucrose and a solution of corn syrup to a . . . mixer . . . to provide a uniform wet mixture of the sucrose coated with the corn syrup;

discharging the wet mixture to a size reduction comminutor to break up lumps;

feeding the comminuted wet mixture to a drier to produce a dried mixture; and

recovering granules of sucrose bound together by corn syrup solids, **wherein from 40 to 80% of the recovered granules will pass through a 10 mesh screen and be retained on a 60 mesh screen.**

Claim 11, from which claims 12, 13, 16-18, 20 and 22 depend, is directed to a process for preparing a **compressed confection**, or the compressed confection resulting therefrom. In relevant part, the process comprises:

(a) preparing a granulated sugar ingredient by a process comprising

feeding granulated sucrose and a solution of corn syrup to a . . . mixer . . . to provide a uniform wet mixture of the sucrose coated with the corn syrup;

discharging the wet mixture to a size reduction comminutor to break up lumps;

feeding the comminuted wet mixture to a drier to produce a dried mixture; and

recovering granules of sucrose bound together by corn syrup solids, **wherein from 0% to 10% of the recovered granules will pass through a 100 mesh screen;**

(b) mixing the granulated sugar ingredient with flavor; and

(c) compressing the granulated sugar ingredient and flavor to form a compressed candy.

The present application is directed to a process that provides a dry granular sugar ingredient, which improves the production of compressed, tableted confection products by enabling them to be formed with a higher initial strength. As a result, the resulting compressed, tableted confection exhibits improved handling and packaging, with fewer broken and chipped tablets. (See, e.g., paragraphs [0001] and [0024].) In particular, Applicants have found that a controlled particle size distribution enables compressed, tableted confections to be produced more efficiently, more reliably, and in a more reproducible way. (See, e.g., paragraph [0036].)

## 2. Morano

Morano discloses processes for recrystallizing sugar that include mixing powdered sugar and an adjuvant such as invert sugar or molasses. (See column 2, line 25 to column 3, line 2.) Notably, Morano states that a sugar for use with their disclosed processes **must** be of suitable particle size. They further state that the sugar is milled to a **powder** wherein:

at least about 50 percent of the granules pass through a 200 mesh screen, at least about 70 percent pass through a 150 mesh screen, and **at least about 85 percent pass through a 100 mesh screen.**

(Column 3, lines 55-58. Emphasis added.)

Morano goes on to state that, **as a critical requirement** when preparing dry fondant aggregates, preferably **at least about 99 percent of the granules pass through a 325 mesh screen**. (Column 3, lines 62-65.) Finally, Morano states that an “unexpected discovery” is that the sugar aggregates made from the disclosed process can be reground to a granulation size wherein **up to 98 percent pass through a 100 mesh screen**. (Column 11, lines 58-61.)

Accordingly, it is to be noted that Morano is focused on the use of a very fine or small crystalline sugar (i.e., “powdered” sugar) to in turn prepare a product also having a very fine or small particle size, primarily for use in the preparation of a fondant. In fact, it is to be noted that Examples 1-10, 13-15 and 17-22 are all directed to the preparation of a fondant, and call for a powdered sugar having a particle size **significantly smaller** than the particle size of the granules prepared or used in the Applicants’ process or composition. For example, Example 1 calls for a powdered sugar having a particle size such that 99 percent passes through a 325 mesh screen, while Examples 2 and 3 call for a powdered sugar having a particle size such that 90 to 95 percent passes through a 200 mesh screen.

Although Morano is almost entirely focused on the use of the disclosed small particle size sugar to prepare fondants, Morano does include a few references to products that may be formed by compressing the disclosed sugar. Specifically, in Example 11, Morano references directly compressible excipients, suitable for preparing such things as breath mints. However, this Example does not specifically reference the particle size of the sugar that is used. Rather, it indicates that the material of Example 9, which in turn references back to Example 1, was used. As noted above, the sugar in Example 1 has a very small particle size, 99 percent of it passing through a 325 mesh screen. Example 12 references a “tableting sugar,” and also clearly states that this sugar has been milled such that not less than 98 percent passes through a 100 mesh screen. Finally, Example 16 states that the sugar therein may be mixed with flavors and used in a fondant, or as a directly compressible excipient to manufacture vitamins. However, like Example 11, this Example does not specifically reference the particle size

of the sugar that is used therein; rather, it references back to Example 1, which as previously noted has a very small particle size.

### 3. The Claimed Subject Matter is Not Obvious

As set forth in M.P.E.P. §2143, in order for the Office to establish a *prima facie* case of obviousness, three basic criteria must be met: (1) the prior art references, when combined, must disclose each and every element of the claim; (2) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references; and (3) there must be some reasonable expectation of success. Further, an obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of the case. The common sense of those skilled in the art can demonstrate why some modifications and/or combinations would have been obvious where others would not. Finally, as noted in the Examination Guidelines For Determining Obviousness Under 35 U.S.C. §103(a) in view of the Supreme Court decision in *KSR Int'l Co. v. Teleflex, Inc., et al.*, the Office must provide a reasonable explanation to support any obviousness rejection.

Applicants respectfully submit the Office has failed to establish a *prima facie* case of obviousness for a number of reasons. First, **each and every element of the claims has not been disclosed or suggested** by the cited reference. Additionally, or alternatively, Applicants respectfully submit the Office has failed to establish a *prima facie* case of obviousness because there is simply **no motivation** to modify the cited reference as suggested by the Office.

As noted above, independent claims 1, 5 and 11, from which all other claims depend, call for or reference granules of sucrose bound by corn syrup solids that have a specific particle size, such that only a recited percentage will pass through a screen of a certain mesh. Specifically:

Claims 1 and 11 state that 0% to 10% of the recovered granules will pass through a 100 mesh screen. The nominal opening of a

100 mesh screen is known to be 149 microns. This means that 0% to 10% of the recovered granules have a size equal to or smaller than 149 microns; stated another way, **from 90% to 100% of the recovered granules have a size larger than 149 microns.**

Claim 5 states that 40% to 80% of the recovered granules will pass through a 10 mesh screen but not a 60 mesh screen. The nominal opening of a 10 mesh screen is known to be 2000 microns, while the nominal opening of a 60 mesh screen is known to be 250 microns. This means that **40% to 80% of the recovered granules have a size equal to or smaller than 2000 microns but larger than 250 microns.**

In contrast to the claims of the present application, Morano is **nearly silent** as to the particle size, or particle size distribution, of the finished product disclosed therein. In fact, **all of the working examples are completely silent** as to the particle size of the finished product. The only reference Morano does make in this regard, is in column 11 (lines 58-61), wherein it is stated that the product made can be reground to a granulation size wherein up to **98 percent pass through a 100 mesh screen.**

Accordingly, **Moran's only disclosure** with respect to the particle size of the finished product is a statement which **indicates 98 percent of the particles may have a particle size of less than or equal to 149 microns.** In contrast, claims 1 and 11 of the present application clearly state that **90% to 100% of the recovered granules have a size larger than 149 microns**, while claim 5 of the present application clearly states that **40% to 80% of the recovered granules have a size larger than 250 microns.**

In view of the foregoing, Applicants' respectfully submit Morano fails to disclose each and every element of the recited claims. In fact, the Office appears to acknowledge as much on page 3 of the present Action, wherein it states:

"[i]t is appreciated that the grind size of claim . . . 5 . . . is not mentioned but to grind sugar to one extent over the other is seen to be within the determination of the ordinary artisan."

Applicants note that the Office does submit, in the above noted passage, that the recited particle size distribution or range would be obvious to one of ordinary skill in the art, but Applicants respectfully disagree. Rather, Applicants submit that motivation to modify to the disclosure of Morano, in order to arrive at the claims subject matter, is clearly lacking.

As noted above, any and all references made by Morano with respect to particle size, either of the starting material (i.e., the powdered sugar) or the finished product, is in the context of the benefits of using or having very small particles. In fact, Morano arguably expresses the **absolute necessity** of using small particles, such as for example when Morano states:

at column 3, lines 55 to 60, that a crystalline sugar for use with this invention **must** be of a suitable particle size (and then goes all to recite, among other ranges, that at least about 85 percent passes through a 100 mesh screen); and,

at column 3, lines 62 to 65, that most preferably, and as a **critical requirement** when preparing dry fondant aggregates by the present invention, at least about 99 percent of the granules pass through a 325 mesh screen (a 325 mesh screen is known to have a nominal opening of 44 microns, which means at least about 99 percent of the granules have a particles size of less than or equal to 44 microns).

Furthermore, and as noted above, Morano's only mention of the particle size of the finished product is again in the context of **encouraging or motivating one of ordinary skill in the art to use particles of a very small size**. Specifically, the only

mention of the particle size of the finished product is when Morano states (at column 11, lines 58-61) that:

[a]nother **unexpected discovery** is that the sugar aggregates made from the process can be reground to a granulation size wherein up to **98 percent pass through a 100 mesh screen** without caking.

The fact that Morano is encouraging the use of small particle size material is not surprising, and in fact is consistent with Morano's focus on the primary end use of the finished product, which is a fondant. (See, e.g., column 3, lines 9-11, wherein Morano states "[t]he invention is an improved process for manufacturing sugar products containing aggregates of **fondant-size** sucrose crystals.") A fondant is a product **distinctly different** from a compressed confection or tablet. For example, a fondant is typically used as an icing, a cream filling or center, or as a fudge base, which are compositions that have smooth texture and therefore call for the use of very small or fine particulate components. This is very different from a compressed confection or tablet, such as a breath mint, which utilized large particulate components.

Accordingly, Applicants respectfully submit **motivation is clearly lacking** to modify the disclosure of Morano in order to arrive at the claimed subject matter. In fact, Applicants submit Morano actually **teaches away** from the claimed subject matter, because (1) to the extent Morano comments on particle size, it is always in the context of the benefits of using **significantly smaller particles**, and (2) Morano almost exclusively focuses on the preparation of a fondant, which is something **distinctly different** from a compressed confection. In fact, Applicants respectfully submit that one of ordinary skill in the art would recognize that, if the sugar aggregates of Morano were reground to a granulation size such that up to 98 percent would pass through a 100 mesh screen, the resulting particles would be unsuitable for use in the preparation of a compressed confection, because such particles would not be compressible.

In view of the foregoing, Applicants respectfully submit motivation is clearly lacking to modify the disclosure of Morano, as suggested by the Office, in order to arrive at the claimed subject matter. Applicants further submit, again in view of the foregoing,



that the Office has failed to provide a reasonable explanation to support the position that such motivation is present. Reconsideration and the withdrawal of the rejection of independent claims 1, 5 and 11 is therefore requested.

Inasmuch as all of the remaining claims depend directly or indirectly from one of claims 1, 5 or 11, these dependent claims are submitted as patentable over Morano for at least the reasons set forth above for the claim from which they depend. Accordingly, reconsideration of the rejection of these claims is also respectfully requested.

### **CONCLUSION**

In view of the foregoing, Applicants respectfully request reconsideration of the rejection of claims 1-3, 5-14, and 16-22 and allowance of all pending claims.

Applicants do not believe any fees are due in connection with this Amendment C; however, the Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 012384 in the name of ARMSTRONG TEASDALE LLP.

Respectfully submitted,

/Derick E. Allen/

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